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Supplementary Materials for fMRI study

Details of Training Session

In order to ensure that participants were able to understand and complete the task correctly all participants attended a training session no more than 14 days before they took part in the MRI scanning session. During this training session participants rated the faces of the two people they would interact with during the scanning session, along with 8 gender matched faces and 10 opposite gender faces for attractiveness and trustworthiness using a slider with 30 positions. The faces were presented in a random order and each face was presented for 2 seconds and participants then had to rate the face.

Following the face rating, participants were given the instructions for the main experimental task that they would undertake during both the training phase and in the scanner. They completed 60 trials of the main experimental task which were equally distributed between the four experimental conditions (15 trustworthy grasping, 15 untrustworthy grasping, 15 trustworthy light and 15 untrustworthy light). The training version of the experimental task used videos where both proposers were of the opposite gender to the participant. In total 41 participants took part in the training session but only those participants showing an affective response to the untrustworthy person, by rejecting more of their offers than they accepted, were invited to take part in the scanning session. This screening procedure was used for two reasons. First it ensured that all participants for the scanning session were able to learn the correspondence between the identity of the proposer and the trustworthiness of the offers. Second it removed those participants who employed the optimal strategy according to rational choice theory and accepted all offers made by either proposer. This was necessary because those who accepted all or almost all offers did not have to pay any attention to the identity of the proposer and so might not be expected to have a strong affective reaction to either proposer. Although removing participants from the study based on their failure to perform as desired in the behavioural task does reduce the generalizability of the current study's results, the expense of scanning participants in an MRI study meant that this screening process was necessary in order to ensure that the participant's tested did experience the two proposers as trustworthy and untrustworthy. Out of the 41 participant's tested in the training session 28 showed the desired pattern of responses and of those, 21 were subsequently scanned and 18 were included in the final analysis (for more details see section 6.2.4).